

IN THE CLAIMS:

Please amend claims 1-17 and 21-29 as follows.

1. (Currently Amended) A system ~~wireless access network~~ comprising:

a first-tier mesh formed of a plurality of first-tier nodes, each of the first-tier nodes of the plurality of first-tier nodes configured to communicate ~~capable of communicating~~ data within the first tier with at least selected others of the first-tier nodes, at least one of the first-tier nodes forming a first-tier sink node;

at least a second-tier mesh formed of a plurality of second-tier nodes, each of the second-tier nodes of the plurality of second-tier nodes configured to communicate ~~capable of communicating~~ data within the second tier with at least selected others of the second-tier nodes, at least one of the second-tier nodes forming a second-tier sink node, the second-tier sink node further capable of communicating with the first-tier sink node of said first-tier mesh,

wherein the system is configured to provide ~~wireless access network provides~~ radio communication of data therein.

2. (Currently Amended) The system ~~wireless access network~~ of claim 1, wherein the first-tier nodes of said first-tier mesh are operable pursuant to first-tier-mesh operational characteristics, and wherein the second-tier nodes of said second-tier mesh are operational pursuant to second-tier-mesh operation characteristics, the first-tier-mesh

operational characteristics and the second-tier-mesh operation characteristics being, at least in some part, dissimilar.

3. (Currently Amended) The system ~~wireless access network~~ of claim 2, wherein the first-tier-mesh operation characteristic comprise a first frequency band within which communication of data is effectuated, wherein the second-tier-mesh operation characteristics comprise a second frequency bandwidth within which communication of data is effectuated, the first frequency bandwidth and the second frequency bandwidth having at least plurality nonoverlapping portions.

4. (Currently Amended) The system ~~wireless access network~~ of claim 1, wherein at least one first-tier node of said first-tier mesh and at least one second tier node of said second-tier mesh are co-located, the at least one first-tier node co-located with the at least one second-tier node configured to communicate ~~capable of communicating~~ with the at least selected others of the first-tier-nodes and the at least one second-tier node co-located with the at least one first-tier node configured to communicate ~~capable of communicating~~ with the at least selected others of the second-tier nodes.

5. (Currently Amended) A system ~~wireless access network~~ comprising:
a first-tier mesh formed of a plurality of first-tier nodes, each of the first-tier nodes of the plurality of first-tier nodes configured to communicate ~~capable of communicating~~

data within the first tier with at least selected others of the first-tier nodes, at least one of the first-tier nodes forming a first-tier sink node;

at least a second-tier mesh formed of a plurality of second-tier nodes, each of the second-tier nodes of the plurality of second-tier nodes configured to communicate ~~capable of communicating~~ data within the second tier with at least selected others of the second-tier nodes, at least one of the second-tier nodes forming a second-tier sink node, the second-tier sink node further configured to communicate ~~capable of communicating~~ with the first-tier sink node of said first-tier mesh; and

wherein said first-tier mesh comprises an ad-hoc mesh which exhibits an ad-hoc configuration and an ad-hoc number of first-tier nodes, and

wherein the system is configured to provide ~~wireless access network~~ ~~provides~~ radio communication of data therein.

6. (Currently Amended) The system ~~wireless access network~~ of claim 5, wherein the first-tier nodes comprises mobile nodes configured to move ~~capable of movement~~ throughout a selected area.

7. (Currently Amended) The system ~~wireless access network~~ of claim 5, wherein communication of data is effectuated pursuant to non line of sight (NLOS) ~~(non-line-of sight)~~ communication techniques.

8. (Currently Amended) A system ~~wireless access network~~ comprising:

a first-tier mesh formed of a plurality of first-tier nodes, each of the first-tier nodes of the plurality of first-tier nodes configured to communicate ~~capable of communicating~~ data within the first tier with at least selected others of the first-tier nodes, at least one of the first-tier nodes forming a first-tier sink node;

at least a second-tier mesh formed of a plurality of second-tier nodes, each of the second-tier nodes of the plurality of second-tier nodes configured to communicate ~~capable of communicating~~ data within the second tier with at least selected others of the second-tier nodes, at least one of the second-tier nodes forming a second-tier sink node, the second-tier sink node further configured to communicate ~~capable of communicating~~ with the first-tier sink node of said first-tier mesh; and

wherein said second-tier mesh comprises a pre-configured mesh which exhibits a fixed configuration and a fixed number of second-tier nodes, and

wherein the system is configured to provide ~~wireless access network provides~~ radio communication of data therein.

9. (Currently Amended) The system ~~wireless access network~~ of claim 8, wherein the second-tier nodes are stationary.

10. (Currently Amended) The system ~~wireless access network~~ of claim 9, wherein communication of data is effectuated pursuant to line of sight (LOS) ~~(line of sights)~~ communication techniques.

11. (Currently Amended) A system ~~wireless access network~~ comprising:
a first-tier mesh formed of a plurality of first-tier nodes, each of the first-tier nodes of the plurality of first-tier nodes configured to communicate ~~capable of communicating~~ data within the first tier with at least selected others of the first-tier nodes, at least one of the first-tier nodes forming a first-tier sink node;

at least a second-tier mesh formed of a plurality of second-tier nodes, each of the second-tier nodes of the plurality of second-tier nodes configured to communicate ~~capable of communicating~~ data within the second tier with at least selected others of the second-tier nodes, at least one of the second-tier nodes forming a second-tier sink node, the second-tier sink node further configured to communicate ~~capable of communicating~~ with the first-tier sink node of said first-tier mesh; and

a third-tier mesh formed of a plurality of third-tier nodes, each of the third-tier nodes of the plurality of third-tier nodes configured to communicate ~~capable of communicating~~ data with at least selected others of the third-tier nodes, at least one of the third-tier nodes forming a third-tier sink node,

wherein the system is configured to provide ~~wireless access network provides~~ radio communication of data therein.

12. (Currently Amended) The system ~~wireless access network~~ of claim 11, wherein the first-tier nodes of said first-tier mesh are operable pursuant to first-tier mesh operational characteristics wherein the second-tier nodes of said second-tier mesh are operational pursuant to second-tier-mesh operational characteristics, and wherein the third-tier nodes of said third-tier mesh are operational pursuant to third-tier-mesh operational characteristics, the first-tier, second-tier, and third-tier mesh operational characteristics, respectively, being at least in some part dissimilar.

13. (Currently Amended) The system ~~wireless access network~~ of claim 11, wherein said third-tier mesh comprises a point-to-point mesh which exhibits a fixed configuration and a fixed number of third-tier nodes.

14. (Currently Amended) The system ~~wireless access network~~ of claim 13, wherein communication of data between the third-tier nodes is effectuated pursuant to line of sight (LOS) ~~(line-of-sight)~~ communication techniques.

15. (Currently Amended) A system ~~wireless access network~~ comprising:
a first-tier mesh formed of a plurality of first-tier nodes, each of the first-tier nodes of the plurality of first-tier nodes configured to communicate ~~capable of communicating~~

data within the first tier with at least selected others of the first-tier nodes, at least one of the first-tier nodes forming a first-tier sink node;

at least a second-tier mesh formed of a plurality of second-tier nodes, each of the second-tier nodes of the plurality of second-tier nodes configured to communicate ~~capable of communicating~~ data within the second tier with at least selected others of the second-tier nodes, at least one of the second-tier nodes forming a second-tier sink node, the second-tier sink node further configured to communicate ~~capable of communicating~~ with the first-tier sink node of said first-tier mesh; and

wherein the at least one of the first-tier nodes forming the first-tier sink node comprises a first first-tier node forming a first first-tier sink node and at least a second first-tier node forming a second first-tier sink node, wherein the at least one of the second-tier nodes forming the second-tier sink node comprises a first second-tier node forming a first second-tier sink node and at least a second, second-tier node forming a second second-tier sink node, the first first-tier sink node configured to communicate ~~capable of communicating~~ with the first second-tier sink node, the second first-tier sink node configured to communicate ~~capable of communicating~~ with the second second-tier sink node, and the first and second second-tier sink nodes, respectively, capable of communicating therebetween, and

wherein the system is configured to provide ~~wireless access network provides~~ radio communication of data therein.

16. (Currently Amended) The system ~~wireless access network~~ of claim 15, further comprising an other of the second-tier nodes of said second-tier mesh positioned between the first second-tier sink node and the second second-tier sink node, communications between the first and second second-tier sink nodes effectuated by way of the other of the second-tier nodes.

17. (Currently Amended) The system ~~wireless access network~~ of claim 15, wherein data communicated between the first-tier nodes of said first-tier mesh is communicated at a first data rate, wherein data communicated between the second tier nodes of said second-tier mesh is communicated at a second data rate, the second data rate greater than the first data rate such that data communicated between the first and second first-tier sink nodes is communicated more quickly by way of the first and second second-tier sink nodes than by way of the first-tier nodes of said first-tier mesh.

18. (Cancelled)

19. (Cancelled)

20. (Previously Presented) A method comprising:
forming a wireless access network providing for communication therein;

forming a first-tier mesh of a plurality of first-tier nodes, each of the first-tier nodes capable of communicating data within the first tier with at least selected others of the first-tier nodes, at least one of the first-tier nodes forming a first-tier sink node; and

forming a second-tier mesh of a plurality of second-tier nodes, each of the second-tier nodes of the plurality of second-tier nodes capable of communicating data within the second tier with at least selected others of the second-tier nodes, at least one of the second tier nodes forming a second-tier sink node further capable of communicating with the first-tier sink node of the first-tier mesh formed during said operation of forming the second-tier mesh.

21. (Currently Amended) The system ~~wireless access network~~ of claim 1, wherein at least one first-tier node of said first-tier mesh and at least one second tier node of said second-tier mesh are not co-located, the at least one first-tier node located distant from the at least one second-tier node configured to communicate ~~capable of communicating~~ with the at least selected others of the first-tier-nodes and the at least one second-tier node located distant from the at least one first-tier node configured to communicate ~~capable of communicating~~ with the at least selected others of the second-tier nodes.

22. (Currently Amended) An apparatus ~~first-tier sink node~~ comprising:
at least one first-tier node ~~nodes~~, wherein the at least one first-tier node ~~nodes~~ is configured to form a first-tier mesh, and the apparatus is configured to communicate first-

~~tier sink node communicates~~ data within the first tier with at least selected others of the at least one first-tier node nodes and to communicate ~~communicates~~ data with a second-tier sink node of a second-tier network.

23. (Currently Amended) The apparatus ~~first-tier sink node~~ of claim 22, wherein the first-tier mesh comprises an ad-hoc mesh which exhibits an ad-hoc configuration and an ad-hoc number of the at least one of first-tier node nodes.

24. (Currently Amended) An apparatus ~~second-tier sink node~~ comprising:
at least one second-tier node nodes, wherein the at least one second-tier node is configured to nodes form a second-tier mesh, and the apparatus is configured to communicate ~~second-tier sink node communicates~~ data within the second tier with at least selected others of the at least one second-tier node nodes and to communicate ~~communicates~~ data with a first-tier sink node of a first-tier mesh.

25. (Currently Amended) The apparatus ~~second-tier sink node~~ of claim 24, wherein the second-tier mesh comprises a pre-configured mesh which exhibits a fixed configuration and a fixed number of second-tier nodes.

26. (Currently Amended) An apparatus ~~first-tier sink node~~, comprising:

at least one first-tier node ~~nodes~~, wherein the at least one first-tier node is configured to ~~nodes~~ form a first-tier mesh;

means for communicating data within the first tier with at least selected others of the at least one first-tier node ~~nodes~~; and

means for communicating data with a second-tier sink node of a second-tier network.

27. (Currently Amended) An apparatus ~~second-tier sink node~~, comprising:

at least one second-tier node ~~nodes~~, wherein the at least one second-tier node is configured to ~~nodes~~ form a second-tier mesh;

means for communicating data within the second tier with at least selected others of the at least one second-tier node ~~nodes~~; and

means for communicating data with a first-tier sink node of a first-tier mesh.

28. (Currently Amended) A method comprising:

forming a first-tier mesh using at least one first-tier node ~~nodes~~;

communicating data within the first tier with at least selected others of the at least one first-tier node ~~nodes~~; and

communicating data with a second-tier sink node of a second-tier network.

29. (Currently Amended) A method comprising:

forming a second-tier mesh using at least one second-tier node ~~nodes~~;
communicating data within the second tier with at least selected others of the at
least one second-tier node ~~nodes~~; and
communicating data with a first-tier sink node of a first-tier mesh.